

REMARKS/ARGUMENTS

Claims 1-20 are pending in the instant application. In the non-final Office Action dated October 1st, 2004, the Examiner has rejected claims 1-16 and 19 under 35 USC 103(a) as obvious over Wan (US 6,385,460) in view of Garceran (US 6,522,888), and has further rejected claims 17-18 and 20 as obvious over Garceran in view of Wan and Butovitsch (US 6,259,927).

In the above listing of claims, claim 1 is amended to include the elements of claim 2. Claims 2-5 are amended to depend from claim 1 as opposed to now-canceled claim 2. Claims 6-10 are amended to dependent form to depend from claim 1, and those claims were originally filed. Claims 11-14 are amended to replace “determined parameter”, which is no longer in claim 1, with the term “speed indication” which is now in amended claim 1. Claims 17 and 19 are amended to delete superfluous language; a function of a parameter value that is a function of a speed indication is also a function of the speed indication directly, albeit a potentially different function. The amendments to claims 17 and 19 are seen as broadening.

Each of the independent claims 1, 17 and 19 recite, in slightly varying language, that the network (or entity thereof) derive an indication of ME speed, and transmit it to the ME which then uses the speed indication to set a filter length. Claim 20 is not restricted to ME speed, but recites that the network determine an indication of signal quality experienced by an ME, and transmit the indication to the ME which uses it to set a filter length. For reasons detailed below, each of these claims are seen as non-obvious over the cited art, regardless of the distinctions between claim 20 and the other independent claims that specifically recite speed.

Wan is directed to a power management system for a mobile unit operating in a network cell (abstract). The abstract further recites that the mobile unit may change scanning rate for neighboring cells based on its own measurement of signal strength (or rate of signal strength change) for signals received from the base station. Further detail is provided at col. 7, lines 18-26, cited in the Office Action, and at Fig. 6. In each instance and as seen throughout Wan, the mobile unit measures signals strength of signals received from the base

station, and can use those signal strength measurements to estimate its own speed through a cell of the network.

The pending claims clearly recite that the network derives the indication of ME speed. If Wan were modified so that the signal strength (such modification not admitted as obvious), as already measured at the mobile units, is then transmitted to the network, then Wan fails to teach deriving speed of the mobile unit in the network or transmitting that speed indication back to the mobile unit, which then uses it to set a filter length. In the above hypothetical modification to Wan, there appears no purpose to do so because the simpler approach would be the mobile unit's determining speed from a measured signal strength and setting its own filter, without involving the broader network or additional transmissions.

Garceran is directed to a system for determining coverage area of a network cell by collecting information on communications between wireless units and the system (network) in association with location information from wireless units (abstract). Col. 5, lines 33-63 list various types of information that the mobile units may report, including signal quality (which is also specifically disclosed at col. 9, lines 15-20 as referenced by the Office Action). As described by Garceran at col. 1, lines 23-28, the network cells are typically irregularly shaped due to local topography. Col. 2, lines 39-42 relates that the shape or size of the cell may be dynamically changed according to the Garceran reference based on the (signal quality) information collected by the base stations as plotted against the reporting mobile units' location information.

The Office Action refers to Garceran col. 9, lines 15-20, and to col. 10, lines 52-56, as teaching or suggesting deriving the ME speed indication in the network and transmitting that indication to the ME. Applicant respectfully disagrees. Consistent with the overall teachings of Garceran, these passages explicitly recite that the measure of signal quality (such as received signal strength) and/or speed and direction of the wireless unit is transmitted by the wireless unit to the network. Whatever data the network receives, Garceran is not seen to teach or suggest deriving wireless unit speed in the network and transmitting that speed indication back to the wireless unit. The data is used by the network for dynamically adjusting cell size and shape. After reporting signal quality data, the wireless units are seen to have no further role in the dynamic cell-delineation purposes of

Garceran. Relevant portions of those passages are reproduced below for the Examiner's convenience:

The wireless unit measures the signal quality, such as received signal strength, of the forward link channel(s) in association with location. The measurements by location could be sent to the serving base station and/or directly to the corresponding neighboring base station(s) 60a-h to be stored in or processed at **the serving base station, the MSC and/or the neighboring base station(s)**. (emphasis added); Garceran, col. 9, lines 17-23.

Additionally, depending on the embodiment, the speed and/or direction of the wireless unit can be included in the location information and **be used by the MSC** in determining which is the best candidate to handoff the wireless unit at the particular position traveling at a particular speed and/or direction. (emphasis added); Garceran, col. 10, lines 51-56.

The latter passage above makes clear that any speed indication in Garceran is sent from the wireless unit to the network, not derived in the network. The former passage above makes clear that whatever data is collected by the network is used for network management purposes, such as handoffs and delineation of cell boundaries.

Further, if in fact Garceran were to be modified such that a network entity derives the wireless unit's speed (a modification not admitted as obvious), there would be no need for the Garceran network to transmit that information to the individual wireless units because Garceran uses the information for handoff purposes and cell delineation.

There is further no indication that the Garceran network uses the information reported from the wireless units to determine any different parameter that is then transmitted back to the wireless units to set a filter length.

Further, to modify any of the cited references so that the network derives an indication of an individual mobile unit's speed would appear to undermine their principals of operation. Wan and Garceran rely on the mobile units to distribute processing power among them. The present invention concentrates processing power, at least for speed derivation, at the network to determine individual ME speed indications, and relies on the ME's to implement the network-derived speed indication in setting a filter length.

Butovitsch is related to power control in a CDMA or packet-based system. As is typical in such power-control regimes, SNR information is sent from the remote terminals to the base station so that power imbalances of signals received at the base station may be minimized to reduce blocked signals. However, the disclosed closed-loop CDMA power control regime is not used to set a filter length at the ME, and does not derive a ME's speed indication in the network. Butovitsch's SNR, reported by the remote terminals, is used for its intended purpose of directing transmit power at the remote terminals, not setting a filter length. The signal from the network to the remote terminals is a power control signal, not an indicator of signal quality experienced by the ME. There appears no motivation to combine Butovitsch with either of Garceran or Wan for two reasons. In Wan and Garceran, the mobile units already have the ME speed information, so transmitting that same information to the network and back again to the mobile units appears to be without benefit. This is seen as strong motivation not to combine, because to do so imparts no further information to the mobile units that they did not have internally, as noted above. Second, Butovitsch is related to controlling transmit power levels at the remote terminals, which is not related to an indication of link quality experienced by the ME as recited in the claims in relation to setting the filter length.

As such, no combination of the cited references renders obvious any of the independent claims. For at least the above reasons, the Applicant believes the claims are patentable and the rejections are overcome. Applicant respectfully requests the Examiner to pass all claims to allowance, and invites the Examiner to discuss any remaining concerns, if there be any, with the undersigned representative via telephone at his discretion.

Respectfully submitted:


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